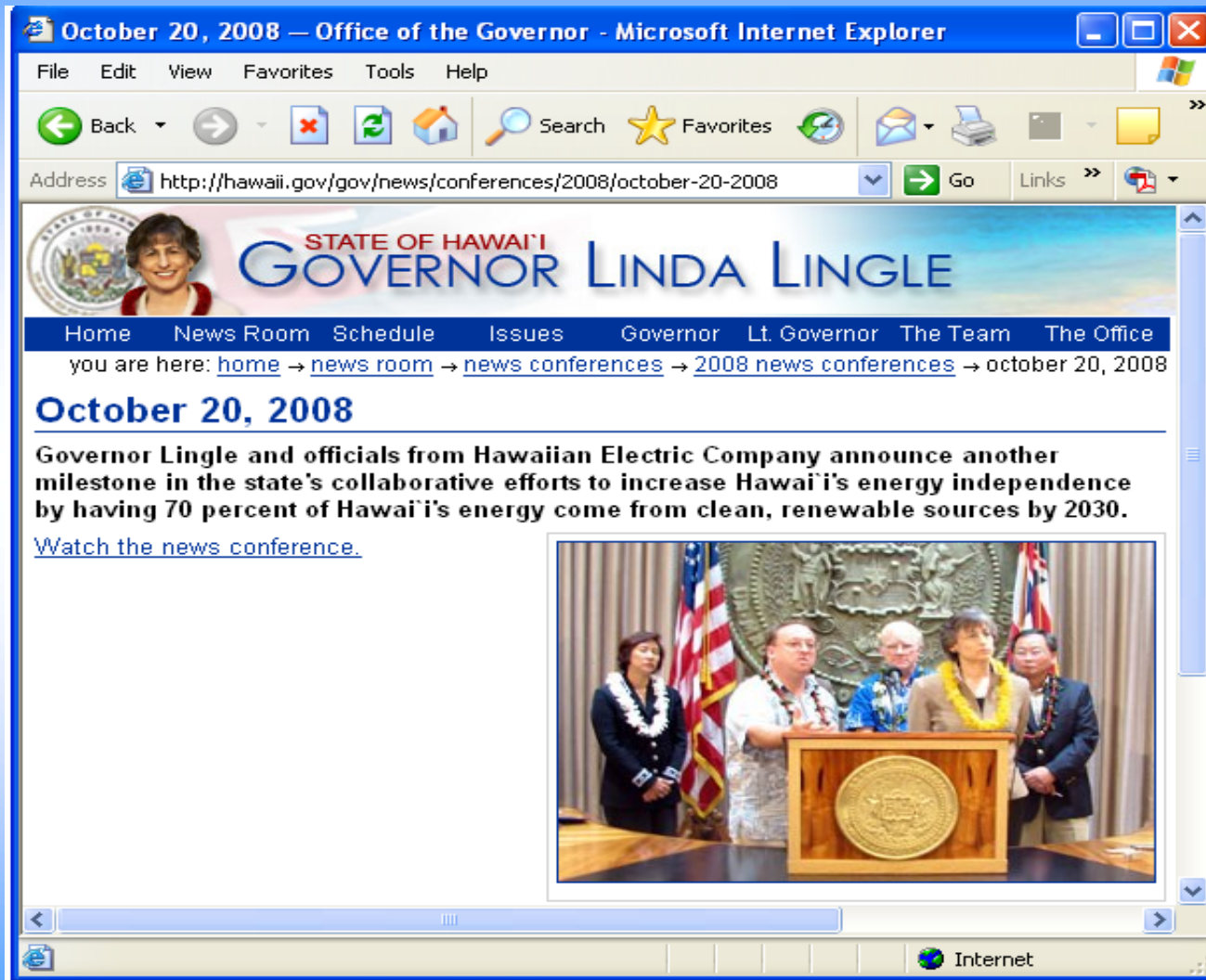


Vision for Developing the Clean Energy Scenario Planning Framework

April 7, 2009
HECO-HELCO-MECO



Hawaii Clean Energy Initiative Energy Agreement Signed on October 20, 2008



The Energy Agreement establishes a Vision with commitments by the parties to its objectives



A Clean Energy Future



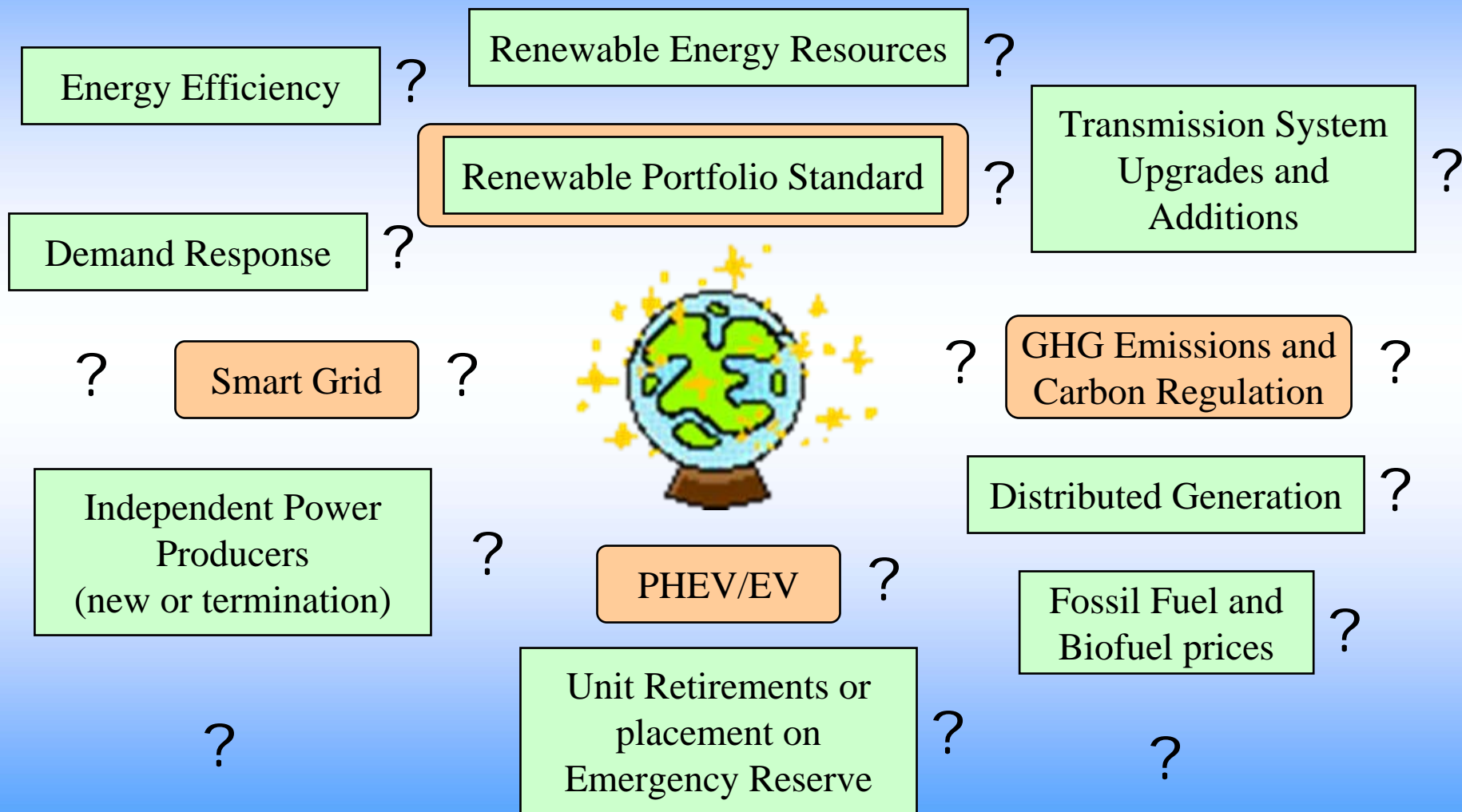
Major Elements of the HCEI Energy Agreement

As stated by Governor Lingle, the HCEI Energy Agreement will reduce by many years the process of moving the state forward to a clean-energy-driven economy by accelerating regulatory changes.

- Renewable Energy Commitments
- Renewable Portfolio Standard
- “Big Wind”
- Decoupling Revenues from Sales
- Feed-in Tariffs
- Net Energy Metering
- Energy Efficiency Portfolio Standard
- Greening Transportation
- Lifeline Rates
- “Pay as You Save” Solar Water Heating (“Solar Savers”)
- Photovoltaic Host Program
- Advanced Metering Infrastructure



What should be considered in achieving A Clean Energy Future?



Commission Orders

- HECO/HELCO/MECO and the Consumer Advocate filed joint requests to the Commission on November 6, 2008, requesting that the Commission close the HECO IRP-4 docket, suspend the filing of HELCO's IRP-4, and suspend the filing of MECO's IRP-4.
- On November 26, 2008, the Commission closed HECO IRP-4 and HELCO IRP-4 and suspend all activities pursuant to the IRP Framework. On December 8, 2008, the Commission similarly closed MECO IRP-4.





Commission Orders (continued)

- Divert resources to develop a Clean Energy Scenario Planning (“CESP”) Framework.
- Revise the IRP Framework to develop the CESP Framework.



Purpose of a Framework

From PUC D&O 11523 establishing the Integrated Resource Planning Framework, the framework:

- is a mandatory guide for the utilities to follow
- is not intended to include all specificities of the process
 - Too much specificity in the framework may hinder the process
- while implementing the planning process, the details and specificities should be taken into account



Clean Energy Scenario Planning

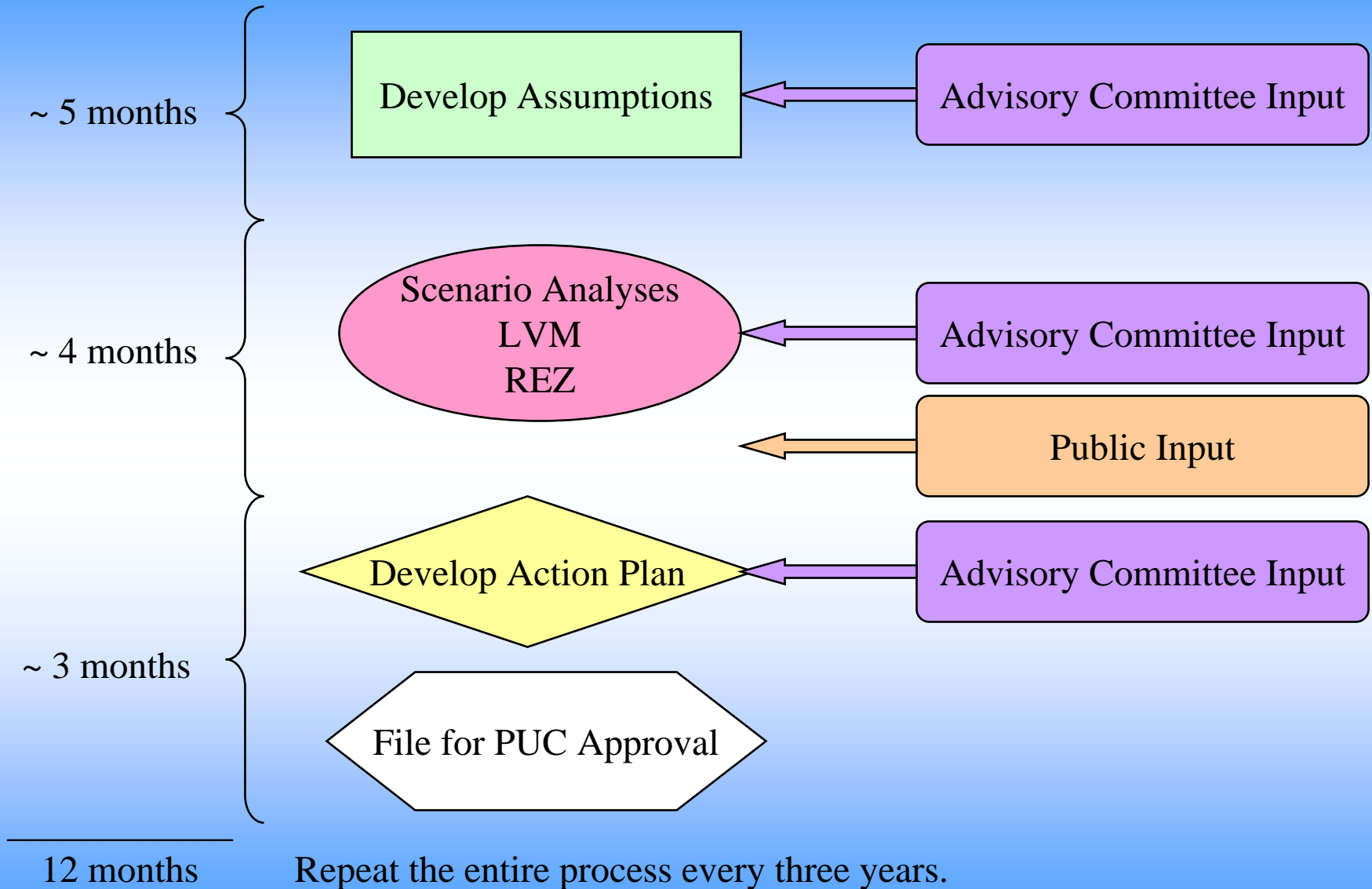
Energy Agreement Initiative No. 32 & 33 (p. 36-41)

Key Objectives:

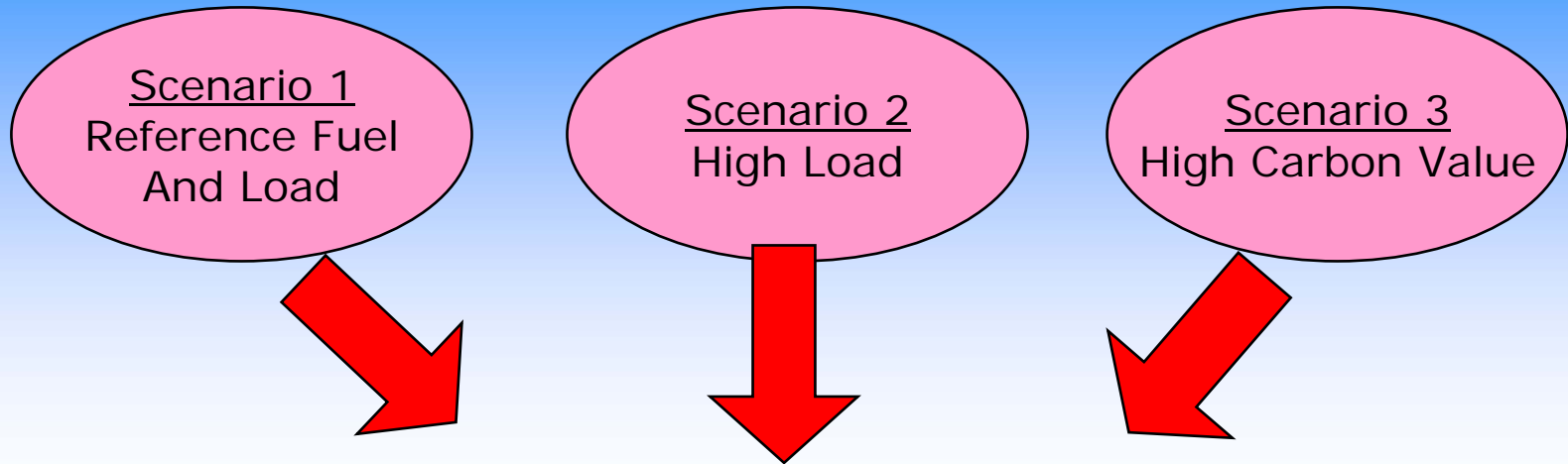
1. A flexible planning process to implement HCEI Energy Agreement in an unpredictable environment.
2. Through scenario analyses, identify a range of energy options providing high level guidance on long-term (10-20 years) direction and develop an Action Plan for near term initiatives (5 years).
3. Identify actions to support needed supply-side, demand-side, and transmission resources.
4. Identify geographic information for new clean energy resources.
 - Locational Value Maps (LVM)
 - Renewable Energy Zones (REZ)
5. Include an Advisory Committee and public review process.



High-Level View of CESP Process



Example: CESP Development



5-yr Action Plan

1. Action Plan items may not necessarily be based on only one particular scenario and could contain elements from all the different scenarios.
2. Action Plan items may include:
 - Generation and Transmission projects
 - Identification of the preferred method to procure new generation and attributes required of the resource (for example, identification of an RFP and the development of the procurement process, parallel plan, contingency plan, etc.)
 - Demand Response programs
 - Renewable Energy Integration Studies



What outcome do we want of CESP?

1. Analysis of scenarios to guide the utilities in developing:
 - 5-year Action Plan
 - Capital projects (generation and transmission)
 - DSM programs
 - Resource additions to comply with Competitive Bidding Framework
 - Locational Value Maps/Clean Energy Investment Zones
 - Renewable Energy Zones
2. 3-year cycle of major CESP
3. 12-month process for CESP
4. Meetings with Advisory Committee held at least quarterly between CESP cycles
5. Minimum of one evaluation report between CESP cycles, preferably in the middle of the three years
 - If significant changes occur, evaluation reports (updates) could be filed at any time, even more frequent than annually if necessary.
 - Main purpose is to provide an update on the Action Plan



High-Level Overview of the Proposed CESP Framework



High-Level Overview of Proposed CESP Framework

- I. Definitions
- II. Introduction
 - A. Goal of Clean Energy Scenario Planning
 - B. Governing Principles (Statements of Policy)
 - C. Utility's Responsibility
 - D. Commission's Responsibility
 - E. Consumer Advocate's Responsibility
 - F. PBF Administrator's Responsibility
- III. The Planning Context
 - A. Major Steps
 - 1. Planning – developing the CESP scenarios
 - 2. Programming – developing the Action Plan
 - 3. Implementation – implementing the Action Plan



High-Level Overview of Proposed CESP Framework

III. The Planning Context

- B. The Planning Cycle – every 3 years
- C. The Docket – complete CESP within one year
- D. Submissions to the Commission
 - 1. CESP scenarios
 - 2. Action Plan
 - 3. Evaluation Report
- E. Public Participation
 - 1. Advisory Committee – quarterly meetings at a minimum



High-Level Overview of Proposed CESP Framework

IV. Planning Considerations

- A. Energy and Demand Forecasts
- B. Fuel Forecasts
- C. Demand-Side Management Forecasts
- D. Distributed Generation Forecast
- E. Resource Options
- F. Locational Value Maps
- G. Renewable Energy Zones
- H. Assumptions; Risks; Uncertainties
- I. Models



High-Level Overview of Proposed CESP Framework

IV. Planning Considerations

J. Analyses

1. Develop the different CESP scenarios.
 - Focus on higher level planning.
 - Look for common themes, assets, and strategies that demonstrate flexibility across a wide range of potential futures and uncertainties.
2. Perform technical analyses to support the CESP scenarios



Open Discussion



Next Steps

1. The Hawaiian Electric Companies and the Consumer Advocate intend to file a proposed CESP Framework by April 28, 2009.
2. We are seeking comments until April 20, 2009 via email. Please go to: <http://cesp.heco.com>

